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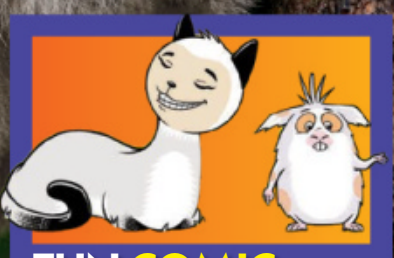

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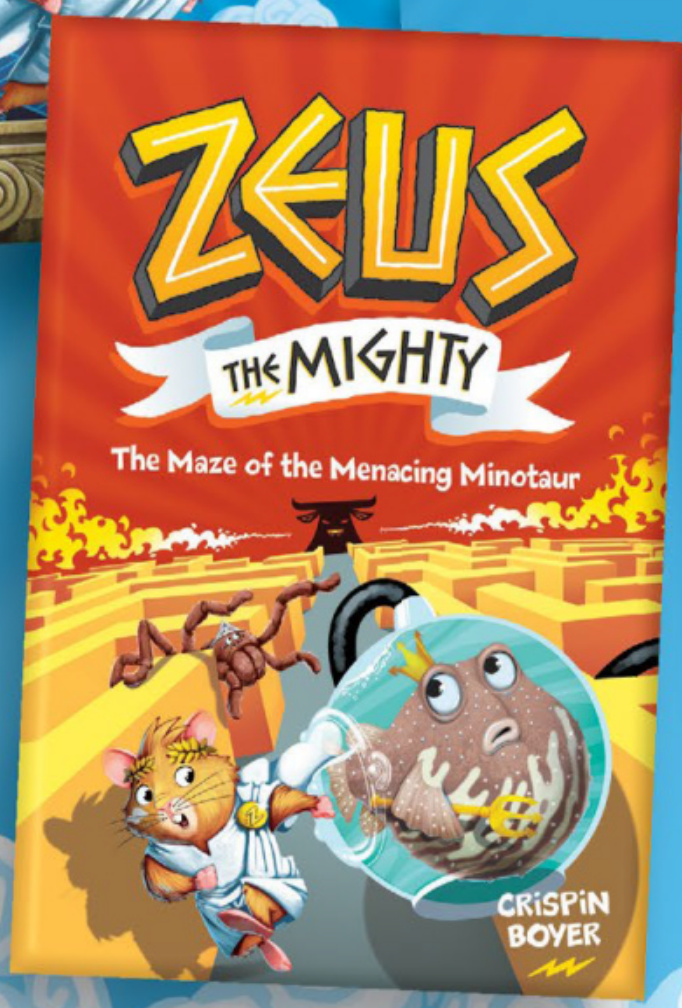

Welcome to the Mount Olympus Pet Center in Athens (Georgia), where Zeus the Mighty (a hamster) leads his critter companions (who all think they are gods and goddesses) on wild adventures across their kingdom. Will they triumph? Find out in these hilarious tales, inspired by Greek mythology!

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weird but true!

Check out these outrageous facts.

BY MARILYN TERRELL AND MEG WEAVER

CHECK OUT THE BOOK!

BABIES HAVE **TASTE BUDS** IN THEIR **CHEEKS.**

AT FRANCE'S ANNUAL **PIG-SQUEALING CHAMPIONSHIPS,** PEOPLE IMITATE THE ANIMALS WITH **SQUEALS, GRUNTS, AND SNUFFLES.**

A **HORSE** FROM MISSOURI IS **SO SMALL** SHE SLEEPS IN A **DOGHOUSE.**

BUILDERS OF **JAPAN'S NIJO CASTLE** CREATED **SQUEAKY FLOORS** TO PREVENT **STEALTHY INTRUDERS.**

SPIDER SILK IS USED TO MAKE **FISHING NETS** IN SOME COUNTRIES.

THE **HUMAN BODY** CONTAINS **A TINY AMOUNT OF GOLD.**

FINLAND HOLDS AN ANNUAL **CELL-PHONE-THROWING CONTEST.**

EARLY **LACROSSE MATCHES** HAD UP TO **2,000 PLAYERS.**

A VOLCANIC ERUPTION 2 MILLION YEARS AGO LEFT **A HOLE AS BIG AS RHODE ISLAND.**

DMITRY LOBANOV / SHUTTERSTOCK (BABY); SONSEDSKA YULIIA / SHUTTERSTOCK (PIG); CB2 / ZOB / WENN / NEWSCOM (HORSES); © RUSSELL KORD / ALAMY (NIJO CASTLE); ZEYNEP DEMIR / SHUTTERSTOCK (PHONE)

GUINNESS WORLD RECORDS

"CAT"-ITUDE IS EVERY-THING.

BY BRANDON McINTYRE

MORE PASTA, PLEASE!

Think she saved room for dessert? Michelle Lesco holds the record for fastest time to eat a bowl of pasta, finishing a plateful of noodles in less than 27 seconds. That's 14 seconds faster than the previous record. Lesco is not a picky eater—she also holds records for fastest time to eat a hot dog with no hands and most mayonnaise eaten in three minutes. Um, yum?

SUPER-LONG CAT

Make room for this feline. Measuring 47 inches from his nose to the tip of his tail, Barivel holds the record for the longest house cat. He's as long as a seven-year-old kid is tall! Barivel can leap over some fences and slide mail off his owner's kitchen counter while standing. Maybe he dreams about extra-long mice.

BARIVEL HANGS OUT IN OWNER CINZIA TINNIRELLO'S ARMS.

HUMAN PYRAMID ON WATER

It's hard enough building a human pyramid on solid ground. Try making one on water skis! That's what members of the Rock Aqua Jays Water Ski Show Team did when they formed the largest human waterskiing pyramid. The six four-level pyramids contained 80 people, who held the formation for more than a thousand feet while being pulled along Wisconsin's Rock River. Glad no one sneezed.

GUINNESS WORLD RECORDS (ALL). INFORMATION PROVIDED BY © 2020 GUINNESS WORLD RECORDS LIMITED.

INCREDIBLE ANIMAL FRIENDS

BY ANDREA SILEN

BABOON BEFRIENDS BUSH BABY

Nairobi, Kenya
How can you tell that Dina the yellow baboon and Bushy the bush baby are BFFs? They're always giving each other bear hugs—even when they're on the move. Bushy often wraps her arms around the baboon's tummy and holds on upside down as Dina crawls around their enclosure at the Nairobi Animal Orphanage.

The critters bonded after arriving at the reserve as infants. "Now Dina acts as Bushy's mom," says Edward Kariuki, an orphanage veterinarian. The baboon protects her pal from other animals and always makes sure Bushy eats enough.

In the wild, bush babies, also known as galagos, are nocturnal, while baboons are active during the day. To hang with the baboon, Bushy switched up her sleeping schedule so she's awake at the same time as Dina. Luckily the motherly baboon doesn't scold Bushy for staying up past her bedtime. "The friendship is rare," primate expert Barbara Smuts says. "But the animals are great for each other."

BUSH BABY

HABITAT Forest treetops in Africa

WEIGHT 2½ to 32 ounces

CRYBABY A bush baby's cry sounds similar to the wails of a human baby.

SUPERSIZE EYES These animals have large eyes that help them see better in the dark.

YELLOW BABOON

HABITAT Savanna and woodlands of Africa

WEIGHT Adults can weigh 50 to 70 pounds.

THE NAME GAME Yellow baboons are named for their yellow-brown fur.

OPEN WIDE If these monkeys feel threatened by a rival, they may yawn to show the other animal their teeth.

THOMAS MUKOYA / REUTERS (BOTH)

Bet You Didn't Know!

7 ultracool facts about things you can't see

1 A microscopic animal called a **water bear** can survive **temperatures** as low as **minus 328°F.**

THIS WATER BEAR HAS BEEN MAGNIFIED 666 TIMES!

2 **Birds** see **colors invisible** to **humans.**

3 **Earth's air** contains tiny bits of **diamonds** from **space.**

4 **A sneeze shoots out** more than **40,000 particles** from the **nose** and **mouth.**

5 When a **waterdrop** hits a puddle, it **bounces** like a **ball** until it's **absorbed.**

6 **Light** travels **18 million times faster** than the speed of rain.

7 Each **gecko foot** has **half a million tiny bristles** for gripping on to surfaces such as **walls.**

EYE OF SCIENCE / SCIENCE SOURCE

BRAiN CANDY

BY JULIE BEER AND CHELSEA LIN

RUBBER DUCKS DO MORE THAN JUST FLOAT IN THE TUB!

A five-story inflated yellow duck **POPPED UP IN CITY HARBORS** around the world.

ZHONG ZHENBIN / ANADOLU AGENCY / GETTY IMAGES

CHECK OUT THE BOOK!

A 59-FOOT DUCK FLOATS IN MACAU, CHINA.

In 1992, a crate with 28,800 rubber ducks and other bath toys **FELL OFF A CARGO SHIP** in the North Pacific Ocean.

Scientists tracked those ducks to learn about **OCEAN CURRENTS.**

AMAZING ANIMALS

I'M GLAD I DON'T HAVE MAMMOTH HAIR STUCK IN MY TEETH.

IT'S OK THAT SCOUT IS CHEWING ON A MAMMOTH FOSSIL—THEY'RE VERY COMMON!

Dog Digs Up Mammoth Tooth

WOOLLY MAMMOTHS WERE ABOUT THE SIZE OF AFRICAN ELEPHANTS, BUT WITH MUCH SMALLER EARS.

A RULER SHOWS THE TOOTH'S SIZE.

Whidbey Island, Washington
Scout the Labrador retriever is a puppy paleontologist: The dog sniffed out a 13,000-year-old woolly mammoth tooth in his owner's backyard!

At first owner Kirk Lacewell thought the six-inch-long fossilized chomper was a rock. "Then it hit me that dogs don't usually carry rocks around," he says.

Lacewell emailed photos to the University of Washington's Burke Museum, where a paleontologist immediately recognized the object as part of a mammoth molar.

A relative of today's elephants, woolly mammoths lived in the Pacific Northwest region of the United States between 10,000 and 100,000 years ago. "So mammoth fossils are fairly common in this part of the country," museum curator Greg Wilson says.

Lacewell now keeps the treasure on a mantle at home. But Scout probably wishes the fossil was still his chew toy!

—Aaron Sidder

Whale "Thanks" Rescuers

Gulf of California, Mexico
The scared humpback whale wheezed as she bobbed in the water. Tangled in a discarded net, she couldn't move, eat, or breathe regularly.

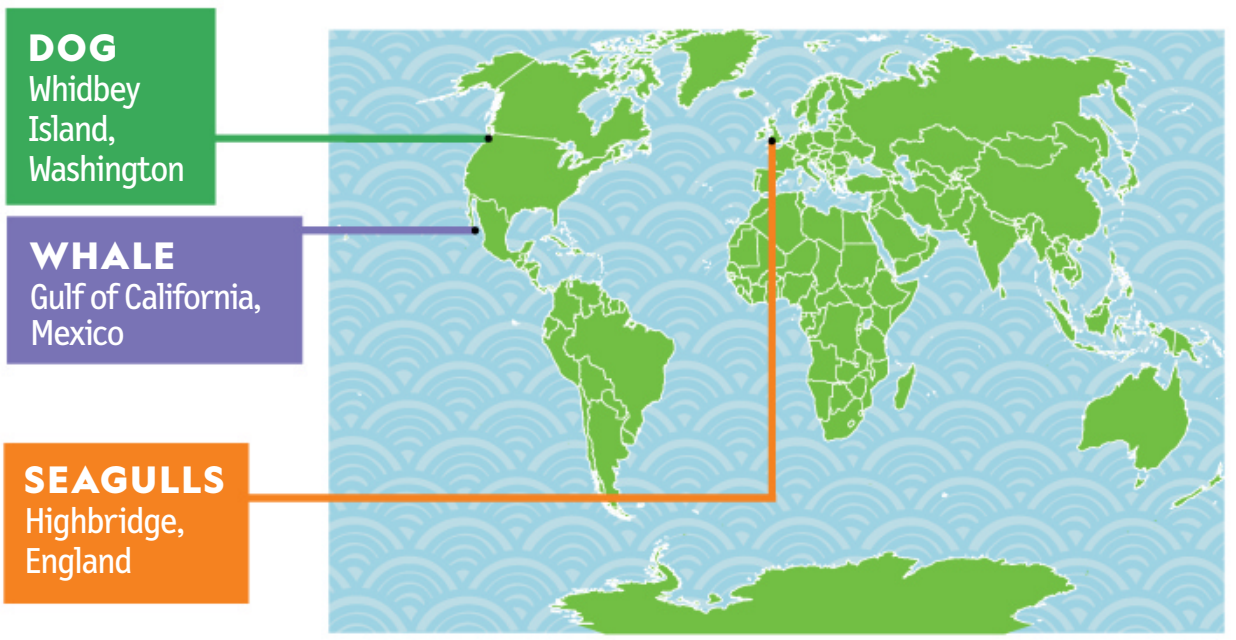
A group of boaters noticed the distressed whale and pulled up beside her. They began cutting away the net with a knife. After an hour, the mammal could escape. She swam away, and the boaters thought they'd never see her again. But suddenly she burst from the water, doing a set of giant jumps.

"I've rarely seen leaps like this," says whale conservationist Michael Fishbach, who was on the boat. "She seemed to be showing pure joy—and possibly even expressing her thanks."

Scott Landry of the Marine Animal Entanglement Response isn't so sure. "She could've been acting oddly because she was in shock," he says. "What's important is that no one was hurt and the whale is free, just as she's meant to be."

—Aline Alexander Newman

THE FREED HUMPBACK'S JUMBO JUMPS WERE CAUGHT ON CAMERA.



Look Out, Mail Carriers!

Highbridge, England
Mail carriers definitely didn't want a special delivery from these seagulls. Every time male postal workers walked by, the local birds would dive beak-first straight for their heads. The only time the sneak attacks stopped: When female letter carriers came on the job!

What could've ruffled the gulls' feathers so much? "We think the birds might have been protecting their babies and were threatened by the men," says Richard Hall, formerly of the United Kingdom's Royal Mail service. But animal behavior expert Petra Mertens says that the birds probably weren't favoring the women on purpose. "The gulls might have been threatened by something only the birds could spot," she says. Although we'll never really know what caused the attacks, the postal workers are just happy the dive-bombing birds finally retreated.

—Amanda Pressner

KIRK LACEWELL (SCOUT, BOTH, AND TOOTH); OZJA / SHUTTERSTOCK (MAMMOTH);
© MICHAEL FISHBACH (WHALE); SOUTH WEST NEWS SERVICE (SEAGULL, MAIL CARRIER)

5 AMAZING KOALA RESCUES

HOW THESE FUR BALLS WERE SAVED BY KIND HUMANS

BY SCOTT ELDER

A young koala scrambles up a eucalyptus tree. It's not trying to grab one of the tasty leaves it loves snacking on—it's trying to get away from the flames and smoke swirling in the forest beneath it.

Earlier this year and in late 2019, a record number of wildfires raged through woodland habitats in Australia, destroying many of the trees koalas live in and rely on for food. The fires burned across some 65,000 square miles, an area the size of Florida. Reports show that more than 8,000 koalas might have been killed in these fires, alongside hundreds of millions of other animals.

Koalas aren't endangered, but they face many other threats in addition to wildfires. Starvation, dog attacks, car accidents, and disease have also put the fuzzy mammals in danger. Luckily brave people step up every day to help these lovable marsupials like the one described above. Read on for five heartwarming koala rescues.

GERRY ELLIS / MINDEN PICTURES (MAIN); MARTIN WALZ (MAP)

Instead of outrunning fires, koalas usually climb trees to escape.

RESCUE 1

THREAT BUSHFIRE
SAVED AT CURRUMBIN WILDLIFE HOSPITAL; CURRUMBIN, AUSTRALIA

A raging fire has passed, so the koala cautiously scoots down her eucalyptus tree toward the ground. But before she makes it, her paws grasp part of the blackened tree trunk that's still smoldering from the fire. The koala has badly burned her paws and other parts of her body.

Hours later, wildlife rescue organization Wildcare Australia sends a team to find animals injured in the bushfire, which happened in 2019. They spot and capture the koala—now named Maddie—and rush her to Currumbin Wildlife Hospital.

Maddie also has burns on her nose and ears, so her caregivers apply a cooling ointment to her injuries. She's also starving. "When a koala's in pain, it won't eat," says Michael Pyne, the senior veterinarian at the hospital. "So we need her burns to heal quickly."

MADDIE BREATHES IN SLEEPING GAS WHILE DOCTORS TREAT HER SO SHE WON'T BE IN ANY PAIN.

Less than a week later, Maddie's ready for a meal. But not just any eucalyptus leaf will do. "Koalas all have their favorite," Pyne says. Leaves that they're not used to eating are harder for them to digest, or just taste yucky. But Maddie finishes off the batch of leaves she's given.

A month after the fire, she's still recovering at the hospital, but Pyne's hopeful that Maddie will be released soon. "It won't be long before she's taking naps in a forest instead of a hospital," he says.

RESCUE 2

THREAT STARVATION
SAVED AT FRIENDS OF THE KOALA; EAST LISMORE, AUSTRALIA

With his belly full of eucalyptus leaves (a koala's preferred meal), the sleepy marsupial finds a sturdy branch to nap on. Suddenly a crash of heavy machinery jolts the koala awake—loggers are knocking down trees to build a highway through the forest. The frightened koala clings to the tree for safety. But like all the other trees in the area, this one soon falls.

Several weeks later, a resident in a nearby neighborhood is stunned to spot the koala atop a small bush. The animal has somehow managed to survive the logging, but without any eucalyptus trees nearby, he's had nothing to eat for weeks. The passerby calls Friends of the Koala care center to come rescue the scared animal.

Koalas can eat up to two pounds of eucalyptus leaves a day.

At the center, rehabilitators feed their starving patient bunches of eucalyptus leaves. Since the koala has two long scratches that run from his shoulder to his belly—probably from a falling tree—his caregivers name him Slash. They decide to wait until his wounds heal before releasing him back to the wild. After two months, they do just that.

"Slash has been seen several times since his release," care coordinator Susannah Keogh says. "He's a local legend."

JOUAN RIUS / NPL / MINDEN PICTURES (BUSHFIRE KOALA); CURRUMBIN WILDLIFE HOSPITAL (MADDIE, FUGI); FRIENDS OF THE KOALA (SLASH); JUERGEN & CHRISTINE SOHNS / MINDEN PICTURES (STARVATION KOALA); MITSUAKI IWAGO / MINDEN PICTURES (DISEASE KOALAS); FREDER / GETTY IMAGES (HEALTHY FORESTS)

RESCUE 3

THREAT DISEASE
SAVED AT CURRUMBIN WILDLIFE HOSPITAL; CURRUMBIN, AUSTRALIA

Koalas can spread disease to one another through eating a nutritious type of poop called pap.

High above the ground in a eucalyptus tree, a koala struggles to reach his leafy meal. His eyes are swollen almost completely shut, and he has a dark stain on his rump. They're signs of a common disease that's hitting koalas hard.

A passerby spots the sickly looking animal and calls a wildlife hotline, which dispatches rescuers to fetch the koala. The marsupial manages to avoid capture for about a month before rescuers finally catch him, earning him the nickname "Fugi," short for fugitive.

Once at Currumbin Wildlife Hospital, veterinarians see that the disease has also infected Fugi's bladder and kidneys. "This disease is treatable if caught early in koalas," says Michael Pyne, the senior veterinarian at the hospital. "But you have to be careful with how much medicine you give them."

The danger has to do with the eucalyptus leaves that koalas eat. The leaves are toxic to most animals, but koalas have developed a special bacteria in their bellies that lets them safely digest the leaves. Too much of an antibiotic might accidentally wipe out the bacteria they need to digest eucalyptus.

But Fugi reacts well to the medicine. Three months later, the koala is declared disease-free and returned to his home.

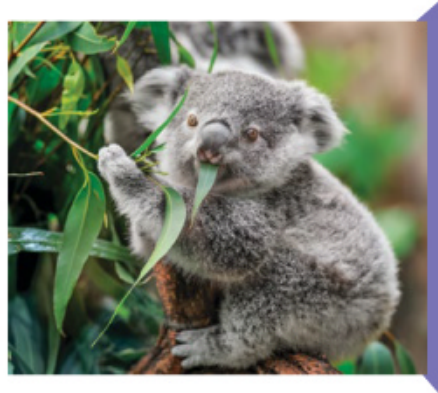
"Releasing these animals is the goal," Pyne says. "The more koalas we have in the wild, the better off Australia is."

HEALTHY KOALAS, HEALTHY FORESTS

Sure, koalas are adorable—but they're also helping scientists better understand climate change.

Koalas are what biologists call an indicator species, a species whose health helps scientists predict how well a habitat is doing. That means if koalas are thriving, so is their environment. But if they're not, the ecosystem is most likely in trouble too.

Today only about 300,000 koalas are left, and scientists think climate change is making things worse.



Average temperatures are rising around the world, and heat waves and droughts are becoming more frequent. In parts of the koala's range where the weather is drier and hotter, thick-furred koalas are overheating. High temperatures and drought can also weaken or kill eucalyptus trees, and increase the risk of forest fires like the ones that burned in the country during late 2019 and early 2020.

Understanding the threats koalas face can help us protect them in the future. And by understanding how climate change impacts koalas, scientists might get a better idea of how climate change impacts other species too.

GET TIPS ON HOW YOU CAN HELP ANIMALS LIKE KOALAS. natgeokids.com/may

Koalas are safer in trees, where predators can't reach them.

RESCUE 4

THREAT DOG ATTACK
SAVED AT FRIENDS OF THE KOALA; EAST LISMORE, AUSTRALIA

TUNGSTEN

Hungry for tasty leaves, a koala crawls on the ground toward some eucalyptus trees at the edge of a forest. He looks and listens for any threats. He isn't as safe away from his trees, where koalas have few predators. Suddenly he hears barking from koalas' deadliest predator: a dog. The koala awkwardly scrambles toward the nearest tree as the unleashed dog charges. Unfortunately, the koala isn't quick enough to escape the canine.

Although the distressed creature has deep bites on his arm, he's alive. A park ranger drives the marsupial to Friends of the Koala care center. There, nurse Marley Christian gives the koala—called Tungsten—antibiotics to keep his arm from getting infected. His wounds are cleaned and bandaged.

Tungsten spends the first couple of days being hand-fed small leaves from a low perch. But on the third day, Christian is thrilled to see the koala perched on the highest spot of a tall log stand in the enclosure. "That's when we knew he'd be able to survive in the wild again," she says. Just three months later, Tungsten was released back into his forest home.

CHECK OUT MORE AWESOME AUSTRALIAN ANIMALS!
natgeokids.com/may

RESCUE 5

THREAT CAR ACCIDENT
SAVED AT PORT MACQUARIE KOALA HOSPITAL; PORT MACQUARIE, AUSTRALIA

KEMPSEY WAZZA

A female koala emerges on the side of the road. Less than 200 feet away are some trees. But the koala has to cross a busy four-lane highway to get there.

The marsupial is halfway across the road when she's suddenly struck by a vehicle and clings to the car's front end. Six miles later, the driver hears an odd noise and pulls over to investigate. He's shocked to see the koala, which drops out from the car and scampers toward nearby trees. The driver calls Port Macquarie Koala Hospital to report the accident.

"This is not the first koala that's come to us like this," hospital director Cheyne Flanagan says. "They're able to hold on to branches in strong winds, so their instinct is to cling to whatever they can grab with their sharp claws."

Hospital staff expect the worst when the patient arrives at the hospital. But aside from some deep cuts the koala received from being dragged, the animal wasn't in terrible shape. Named Kempsey Wazza, she suffered no broken bones or fractures—unusual for a marsupial struck by a vehicle.

After 10 days, Kempsey Wazza's bandages are removed; about a month after that she's released back into the wild. "Not all of our patients are so lucky," Flanagan says. "Kempsey Wazza is one tough koala."

The Australian government is placing "Koala Crossing" signs near roads where the marsupials live to help drivers stay alert.

SUZI ESZTERHAS / MINDEN PICTURES (DOG ATTACK KOALA, SLEEPING SLOTH); FRIENDS OF THE KOALA (TUNGSTEN); PORT MACQUARIE KOALA HOSPITAL (WAZZA); DAVID CHONG / ALAMY (CAR ACCIDENT KOALA); MARCO SIMONI / GETTY IMAGES (SLEEPING KOALA); SASHKIN / SHUTTERSTOCK (CROWN)

ANIMAL SHOWDOWN: LAZIEST

Koalas and sloths are so slow, it's sometimes hard to tell if they're awake or asleep! But which truly deserves the title of the laziest?

A KOALA CLINGS TO A TREE WHILE IT NAPS AT LONE PINE KOALA SANCTUARY IN BRISBANE, AUSTRALIA.

KOALA VS. SLOTH (Three-toed and two-toed)

WHERE THEY LIVE

Eastern Australia

TIME FOR A NAP?

Koalas doze about 18 hours a day—almost twice as much as sloths. That means they're awake only about 25 percent of the time.

MOVING IN SLOW MOTION

Koalas have little reason to leave the eucalyptus trees they live in, since they're surrounded by their favorite food. When they venture to the ground, though, they can break into a gallop, moving up to 18 miles an hour.

H_2O OR NO?

It takes too much effort for koalas to drink water the normal way. They get most of the moisture they need from the eucalyptus leaves they eat.

Forest canopies of Central and South America

These animals might appear to be asleep, but they're often actually awake. In fact, they sleep only about 9.6 hours each day. So sloths *move* slowly, but they're not very sleepy.

Sloths spend much of their lives just hanging around, suspended from trees with their long, curved claws. When they do make a move, they travel only about 0.1 mile an hour, or about nine feet a minute. This makes sloths the slowest mammals in the world.

While sloths get some hydration from the fruits they eat, they get water mostly by licking it off of leaves.

A BROWN-THROATED THREE-TOED SLOTH SNOOZES IN A SANCTUARY IN COSTA RICA.

WINNER: KOALA

Believe it or not, koalas are actually lazier than sloths! Although sloths move slowly, they don't sleep most of their days away. Despite their near-total lack of trying, koalas win the crown in this showdown!

CHECK OUT THE BOOK!

FOR MORE CRITTER CONTESTS, WATCH *ANIMAL SHOWDOWN*. natgeokids.com/may

A red-eyed tree frog has suction-cup-like toes and feet that produce a gluey mucus to help it climb and stick to surfaces.

One of

18+

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this frog's calls sounds like a baby rattle.

The amphibian uses its long, sticky tongue to catch prey like crickets and moths.

WORLD'S W

CHECK OUT THE SCIENCE BEHIND THESE COASTERS, WATERSLID

BY STEPHANIE WARREN DRIMMER

All rides are fun, but many also use cool technology and scientific forces to *really* push the limits. Discover the science behind five of the coolest amusement-park rides around the world.

SIX FLAGS OVER GEORGIA (PANDEMONIUM, BOTH); CHRIS PETER / SEAWORLD SAN ANTONIO (BREAKAWAY FALLS, BOTH). SHIKHEI GOH / GETTY IMAGES (FROG, PAGES 18-19)

PANDEMONIUM

hurl-o-meter

WHERE Six Flags Over Georgia in Austell, Georgia

THE RIDE Pandemonium takes riders to new heights, swinging them nearly 150 feet aboveground—about as high as a 15-story building. Forty riders strap in around the rim of the disk-like ride. Then the disk starts swinging from side to side until it reaches its peak height, sailing at about 70 miles an hour.

COOL SCIENCE: INERTIA

After a powerful motor gives this ride, called a pendulum, a push to get started, it continues to move back and forth. That's because of the force of **inertia,** which is **when an object keeps moving unless it's stopped by an outside force.** Thank goodness for a computer program, which eventually tells Pandemonium to stop—otherwise you'd be stuck on a never ending thrill ride!

LDEST RIDES

DES, AND MORE.

IHU'S BREAKAWAY FALLS

hurl-o-meter

WHERE Aquatica San Antonio in San Antonio, Texas

THE RIDE Climb 118 steps to reach the top of this mega-slide, where you'll step inside a clear tube. Once you give the thumbs-up, the floor beneath your feet will suddenly disappear! You'll plunge down the water-slide before hitting the first of several corkscrew turns before zooming to a halt in the pool below—all in about 10 seconds.

RIDERS START WITH A DROP IN A FIBER-GLASS CHUTE.

COOL SCIENCE: GRAVITY

Once the trapdoor opens beneath the rider, gravity takes over. **Gravity,** or **the force that pulls everything toward Earth's center,** tugs the rider down at up to 24 feet per second, nearly as fast as the world's speediest human runner. Usually a drop like that would be slowed by **friction,** or **the resistance that occurs when one object moves against another** (sort of like when you go down a playground slide). But on this ride, the water reduces friction and allows you to slide down even faster. That makes for a major splash at the bottom.

hurl-o-meter

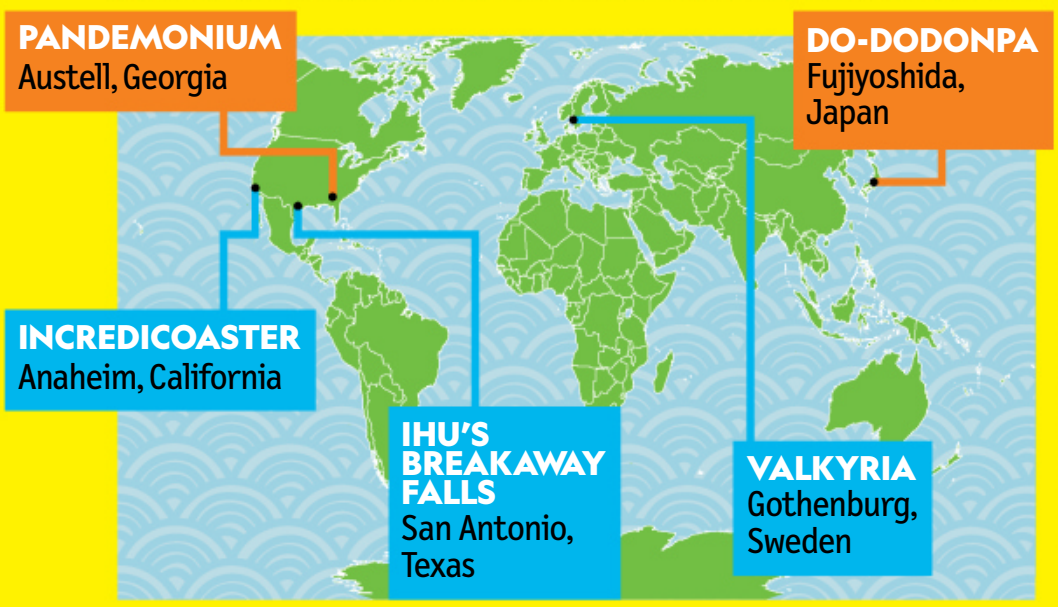
INCREDICOASTER

WHERE Disney California Adventure Park in Anaheim, California

THE RIDE Disney California Adventure's newest roller coaster follows superhero family the Incredibles as they—and riders—have to catch up to baby Jack-Jack. The ride whisks passengers through three enclosed tunnels, plus a series of steep climbs and drops in between each, up to 55 miles an hour. But the most thrilling moment comes when riders plummet down a 108-foot drop before zipping up and then turning upside down in the ride's only loop-the-loop.

COOL SCIENCE: CENTRIFUGAL FORCE

Your safety belt isn't the only thing keeping you in your seat when a roller coaster turns you upside down. You can thank **centrifugal force, which draws objects moving in a circle** (in this case, the roller coaster car zooming around the loop-the-loop) **away from the circle's center** (here, the empty space in the middle of the loop). The force pushes you against the coaster car, giving you the feeling of being squashed into your seat—and keeps you from flying out.



hurl-o-meter

DO-DODONPA

WHERE Fuji-Q Highland in Fujiyoshida, Japan

THE RIDE Do-dodonpa features the fastest acceleration of any roller coaster in the world, hurtling from zero to 112 miles an hour in under two seconds. That's an acceleration rate twice as fast as some of NASA's spacecraft launchers. Once riders reach maximum speed, they zoom 160 feet aboveground to the highest part of the coaster before dropping back down again.

COOL SCIENCE: ACCELERATION

The secret behind Do-dodonpa's **acceleration,** or **how fast an object can change its speed,** is its special launch system. Traditional roller coasters put their cars in motion by dragging them to the top of a hill with a metal chain, then letting gravity and kinetic energy (see next page) do the rest. But Do-dodonpa accelerates its cars with a blast of compressed air at the beginning of the ride. The molecules in the compressed air are packed together more tightly than they are in regular air, making compressed air denser, or heavier, than regular air. The compressed air packs more of a, well, punch to accelerate riders into a more scream-worthy start.

THE WALT DISNEY COMPANY IS A MAJORITY OWNER OF NATIONAL GEOGRAPHIC PARTNERS. JOSHUA SUDOCK / DISNEYLAND RESORT (INCREDICOASTER); COURTESY OF FUJI KYUKO CO., LTD (DO-DODONPA); MARTIN CARLSSON / ALAMY (VALKYRIA)

hurl-o-meter

VALKYRIA

WHERE Liseberg in Gothenburg, Sweden

THE RIDE Just before this coaster makes its most dramatic plunge, it pauses. Eighteen riders hang in the air, waiting for the steep drop. Then the coaster zooms down into an underground tunnel at about 65 miles an hour. Less than two seconds later, riders pop back up aboveground and blast through three loop-the-loops before the ride is over.

COOL SCIENCE:

KINETIC ENERGY

By the time riders are poised at the top of Valkyria, the ride has built up potential, or stored, energy. As it zips down, that potential energy becomes **kinetic energy—the energy of motion.** This transformation of energy (along with gravity) is what gives the ride its spine-tingling speed, as well as what propels it to blast up from the underground tunnel into the next part of the ride.

RIDERS DROP NEARLY 165 FEET TOWARD AN UNDERGROUND TUNNEL.

WATCH COOL COASTERS IN ACTION.
natgeokids.com/may

HOUND HEROES

DISCOVER HOW THESE DOGS ARE KEEPING SOUTH AFRICA'S RHINOS SAFE.

BY PAUL STEYN
PHOTOS BY SEAN VILJOEN

A pack of black-and-tan hound dogs surround a tree in South Africa's Kruger National Park. The dogs are jumping at the base of the tree, barking at something in the branches above: They've trapped a rhinoceros poacher.

South Africa is home to about 80 percent of the world's last remaining rhinos. But some 8,000 rhinos have been poached, or illegally hunted, in South Africa since 2008. That's because the demand for rhino horns has gone up—they're mostly smuggled into Asia to be used in medicine, even though they have no medicinal value. More than half of these rhinos were killed in Kruger and surrounding areas.

To help protect the species, officials came up with a clever idea that was perfect for sniffing out bad guys: Texas hound dogs.

1 DURING A TRAINING EXERCISE, JOHAN VAN STRAATEN RELEASES HOUND DOGS IN SOUTH AFRICA'S KRUGER NATIONAL PARK.

MARTIN WALZ (MAP)

GOING TO THE DOGS

Back in 2013, rhino poaching in South African parks was on the rise. So the agency that oversees Kruger paired local dogs with rangers to track the poachers. But the human-dog pairs weren't able to keep up with the fleeing poachers.

"Building a tracking dog team is a huge job," says Theresa Sowry, who runs the Southern African Wildlife College, a wildlife management and training facility near Kruger. "You need the right genetics and the right training to bring it together." These dogs didn't have all that, so they didn't catch many poachers.

TICKET TO TEXAS

Then in early 2017, Sowry heard about a group of dogs—black-and-tan hounds—used by Texas law enforcement officers to track down escaping prison inmates. So she headed to Refugio, Texas, to see them.

At the ranch of law enforcement official Joe Braman, Sowry and her team watched 10 of Braman's dogs trail a pretend prisoner in the brush. The excited hounds would split up and compete, howling to be the first to pick up the scent.

They would then work together as a team to follow the scent while deputies trailed behind. Once they caught up with the human, the hounds surrounded him,

barking as the escapee climbed up the nearest tree.

"We had no idea if these dogs would catch poachers in Africa, which has a different landscape—and different animals—from Texas," says Ivan Carter, whose conservation foundation introduced Braman to Sowry. But they wanted to try.

Along with dog trainer Zeke Ortiz, Braman spent the next several months training his hounds to improve their scent-tracking skills and barking abilities (so they're loudly able to alert their human helpers to where they are at any time). Then 20 of the best hounds were off to South Africa.

EARLY SUCCESS

Braman had only just arrived at the Southern African Wildlife College when the first call came from the savanna. Poachers had killed a rhino—and they were on the run. The Texas dogs were rushed into two helicopters (they all couldn't fit in just one), which get the hounds to the site fast. The noisy copters also scare off dangerous predators.

Braman admits to being a little nervous about what the dogs might encounter. "They had never seen an elephant before—never seen a lion. Never been in a helicopter."

On the ground, 10 excited hounds immediately picked up the scent trail. Fitted with GPS collars, they bolted across the savanna past herds of wildebeest, darting through bushes and over countless eight-foot-tall termite mounds. After they'd covered about 10 miles, Braman got a call from one of the helicopters trailing the dogs from the air: The pack had just caught up with the four poachers.

With information from the hounds' GPS collars, Braman was easily able to find the dogs. "When we arrived, they had one guy cornered against a tree," he says. "And we took all the poachers into custody. No one could believe it."

The next day, the team caught three more poachers; the day after that, another two. "To have the hounds catch poachers from the start was proof we were doing something right," Carter says.

MORE HOUNDS = SAFER RHINOS

Before the Texas hounds arrived, rangers were nabbing only about 5 percent of known poachers. But with the new dogs on the prowl, more than half of those bad guys are now being caught.

Soon the hounds in South Africa started having puppies of their own. According to Carter, these dogs may one day be sent to other areas of Africa that need hounds to catch wildlife poachers. Thanks to the hounds' protection, rhinos and other animals are getting a chance to roam free.

Adapted from a September 2019 National Geographic online Wildlife Watch article

Check out more heroic dogs.
natgeokids.com/may

2

WHILE THE HOUNDS TRACK A PRETEND POACHER, THEIR TRAINERS TRACK THEIR LOCATION THROUGH GPS COLLARS THE DOGS WEAR.

3

THE HOUNDS TRAP A "POACHER" IN A TREE. IF THIS WERE A REAL POACHER, THE HOUNDS WOULD KEEP HIM TRAPPED UNTIL LAW ENFORCEMENT ARRIVED.

THE MAZE OF THE MENACING MINOTAUR

BY CRISPIN BOYER
ART BY ANDY ELKERTON

Zeus, a tiny hamster with a big ego, is out to prove that he's worthy of ruling over his fellow pets at Mount Olympus Pet Center, who—like him—are all named after Greek gods and goddesses.

In this excerpt from *Zeus the Mighty: The Maze of the Menacing Minotaur,* Zeus and his best pal, Demeter the grasshopper, have entered a mysterious maze below the pet center to investigate the source of some stifling heat. But something terrifying might be standing in their path ...

Zeus the Mighty was not lost. He'd been wandering in a warren of metal passages for the past hour. He was deep underground, a long way from his palace on Mount Olympus. He wasn't even sure if he was still in Greece. But Zeus was definitely, absolutely, not lost.

"Are we lost?" asked Demeter, Zeus's most frequent Olympian companion. "This maze is just so ..."

"Maze-like?" Zeus finished her thought. "And no, we're not lost—I don't get lost." He rubbed his chin as he inspected yet another fork in the tunnel.

"Sure, why would you get lost?" replied Demeter. "I mean, mazes are, like, a hamster thing."

"This isn't a hamster thing, pal," Zeus said. "I don't get lost because I'm Zeus, the king of the gods. Always knowing where to go comes with the job."

"True," Demeter nodded. "You always know where to go. Most of the time. Sometimes ..." She looked at the fork in the tunnel. "So ... where do we go?"

Zeus sniffed at one of the tunnels, then shrugged. "This-a-way."

The two Olympians had come across the entrance to this underground maze earlier that night while exploring. They had nearly stumbled into a rectangular pit, more than big enough to fit the hamster and his companion. Zeus had paid little mind to this pit during past excursions; it had always been blocked by a metal grate. Tonight, the grate was gone—just one of the many strange changes happening in Greece lately.

The deeper they delved into the maze, the hotter it got. The normally spiky fur on Zeus's head flopped over his crown.

"I swear we've walked under every part of Greece," Demeter muttered, her antennae sagging. "It's a good thing we're not lost or I'd be worried—"

"What in blazes is that?" Zeus interrupted as they rounded a corner. The two had reached the entrance to a much larger cavern. Heat crashed over them like a tsunami. The air shimmered with it. Out of the gloom loomed a terrifying sight: a towering monstrous beast with ash-covered horns. It fixed on them with beady eyes set above fiery orange nostrils linked by a silver chain.

"You see that big bull ... thing standing there, too, don't you, Zeus?" Demeter asked flatly. "Or is this heat playing tricks on my eyes?"

Zeus's head was swimming. He shook it and tried to focus on the monster's eyes, its nostrils, that chain. Then he saw its mouth, locked in a grimace of square teeth shut tight.

"I see it," Zeus whispered. "Do you see what I see poking from its teeth?"

"That's not ..." Demeter answered slowly. "That's not fur, is it?"

"I think we should go," Zeus said. He turned and looked for the tunnel they had come from but saw dozens of openings all around the cavern. "Blast it, which one's the way out?" Zeus dared not look back at the horned beast in the center of the cavern. He could practically feel the monster bearing down on them.

Will Zeus and Demeter find their way out of the sweat-inducing maze—before the "monster" attacks? Find out in the book *Zeus the Mighty: The Maze of the Menacing Minotaur.*

ZeusTheMighty.com

WIN THE BOOK!
TRY ONLINE APRIL 22-29 for a chance to win an autographed copy of *The Maze of the Menacing Minotaur.*

natgeokids.com/may

FUN STUFF

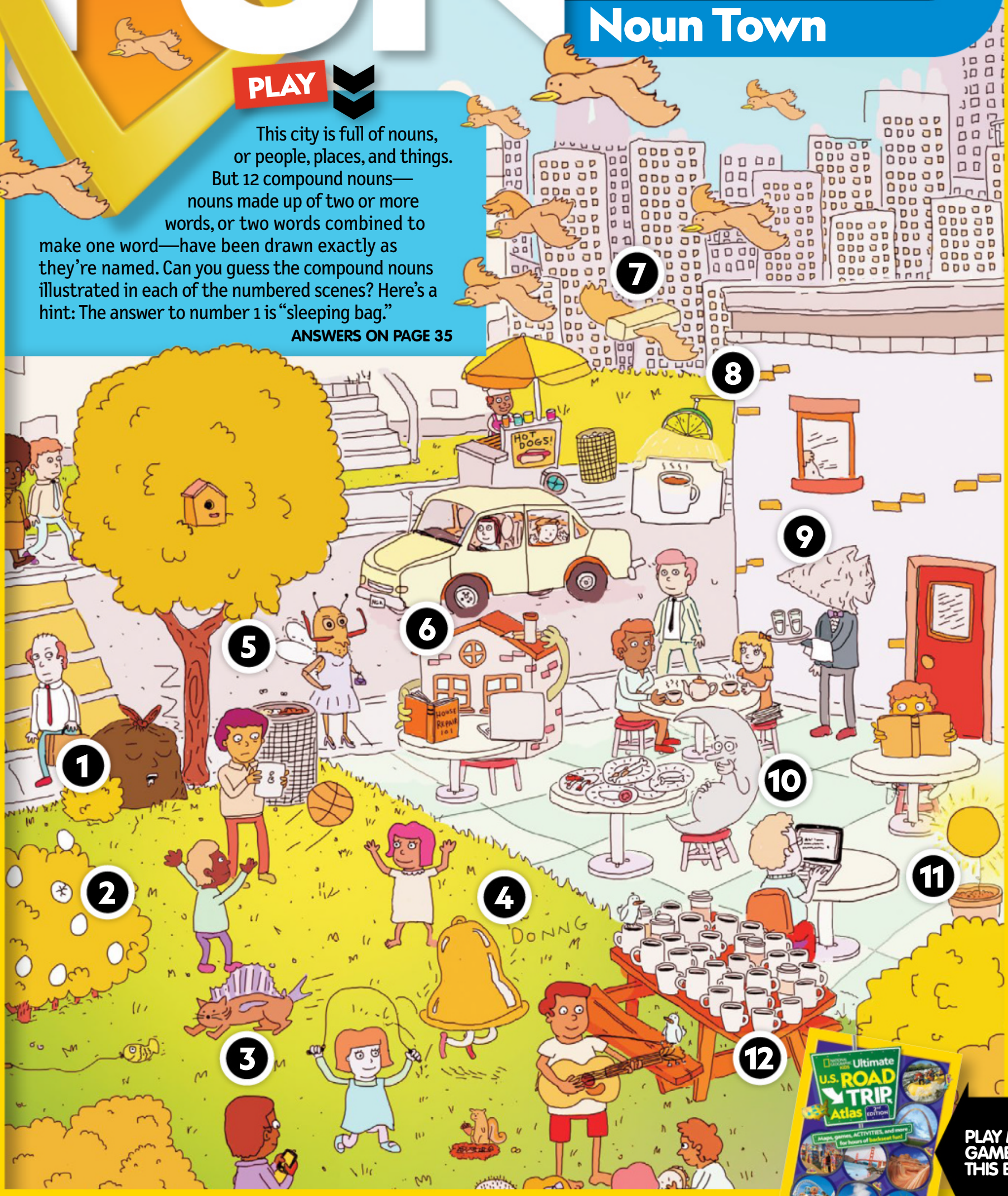
GAMES, LAUGHS, AND LOTS TO DO!

Noun Town

PLAY

This city is full of nouns, or people, places, and things. But 12 compound nouns—nouns made up of two or more words, or two words combined to make one word—have been drawn exactly as they're named. Can you guess the compound nouns illustrated in each of the numbered scenes? Here's a hint: The answer to number 1 is "sleeping bag."

ANSWERS ON PAGE 35



JOREN CULL

PLAY MORE GAMES WITH THIS BOOK.

SIGNS OF THE TIMES

Seeing isn't always believing. Two of these funny signs aren't real. Can you figure out which two are fake?

ANSWERS ON PAGE 35

1

2

3

4

5

6

7

PAUL SOUDERS / GETTY IMAGES (1); IMAGE DIGITALLY COMPOSED; YAGIL HENKIN / ALAMY (2); ROBERT HARDING / ALAMY (3); JONATHAN BLAIR / NATIONAL GEOGRAPHIC IMAGE COLLECTION (4); JONATHAN TOURTELLOT / NATIONAL GEOGRAPHIC IMAGE COLLECTION (5); IMAGE DIGITALLY COMPOSED; DANITA DELIMONT / GETTY IMAGES (6); PETER DAZELEY / GETTY IMAGES (7)

STRIKA ENTERTAINMENT

UnLeaShed

1

WHAT A *BEAUTIFUL* SPRING DAY!

IT IS! BUT, MAJOR—WHAT'S GOT YOU *DOWN*?

MILDRED IS *MISSING.* I'M SO WORRIED. SHE'S MY BABY—ER, I MEAN, FAVORITE TOY.

2

I KNOW!

WHAT WE NEED IS A *LUCKY CHARM.* THEN MILDRED IS *BOUND* TO TURN UP!

3

I HAVE A *WISHBONE.* COULD *THIS* BRING US GOOD LUCK?

THAT *SLOBBERY CHEW TOY* IS ONLY *BAD* LUCK.

4

LUCKILY, I HAVE A BETTER IDEA! LET'S FIND A *FOUR-LEAF CLOVER!*

5

THIS YARD IS *HUGE!* IT PROBABLY HAS *LOTS* OF FOUR-LEAF CLOVERS!

6

THE PETS START SEARCHING, BUT SOON ...

QUIT *TICKLING* ME WITH *THREE-LEAF CLOVERS!* THIS *ISN'T HELPING!*

BUT YOU *CAN'T BE SAD* WHILE YOU'RE *LAUGHING!*

FOCUS, PEOPLE, *FOCUS!* THOSE CLOVERS *AREN'T* GOING TO FIND THEMSELVES—I WANT *RESULTS!*

7

GOOD LUCK WITH THAT—I'D RATHER LOOK FOR A FOUR-FOOTED MOUSE.

8

AFTER A LONG, HARD SEARCH ...

THIS IS THE UNLUCKIEST YARD EVER—WE FOUND ZERO FOUR-LEAF CLOVERS.

I'M SORRY, MAJOR. I WAS SURE WE COULD FIND MILDRED IF WE HAD A LITTLE LUCK.

THANKS ANYWAY, GUYS.

MAJOR! MAYBE YOU'RE A LUCKY DOG AFTER ALL.

9

MILDRED!

SO THAT'S WHERE ALL THE FOUR-LEAF CLOVERS WENT!

I GUESS YOU GUYS WERE BARKING UP THE WRONG TREE!

10

WELL SPOTTED, PRINCESS TALLULAH!

IT'S JUST LULU!

I BET MILDRED WILL BE THE BEST LUCKY CHARM EVER—ONCE WE'VE RESCUED HER.

HOLD ON, MILDRED! MAJOR-WAJOR'S COMING!

CAN THE PETS KEEP UP THEIR GOOD LUCK? FIND OUT IN THE NEXT UNLEASHED!

EXPLORER ACADEMY

In the new book *Explorer Academy: The Star Dunes*, 13-year-old Cruz Coronado breaks secret codes and unravels puzzles in order to fight dangerous villains and solve mysteries. Test your own skills by solving the puzzle on this page, then check out more about the book at **ExplorerAcademy.com**.

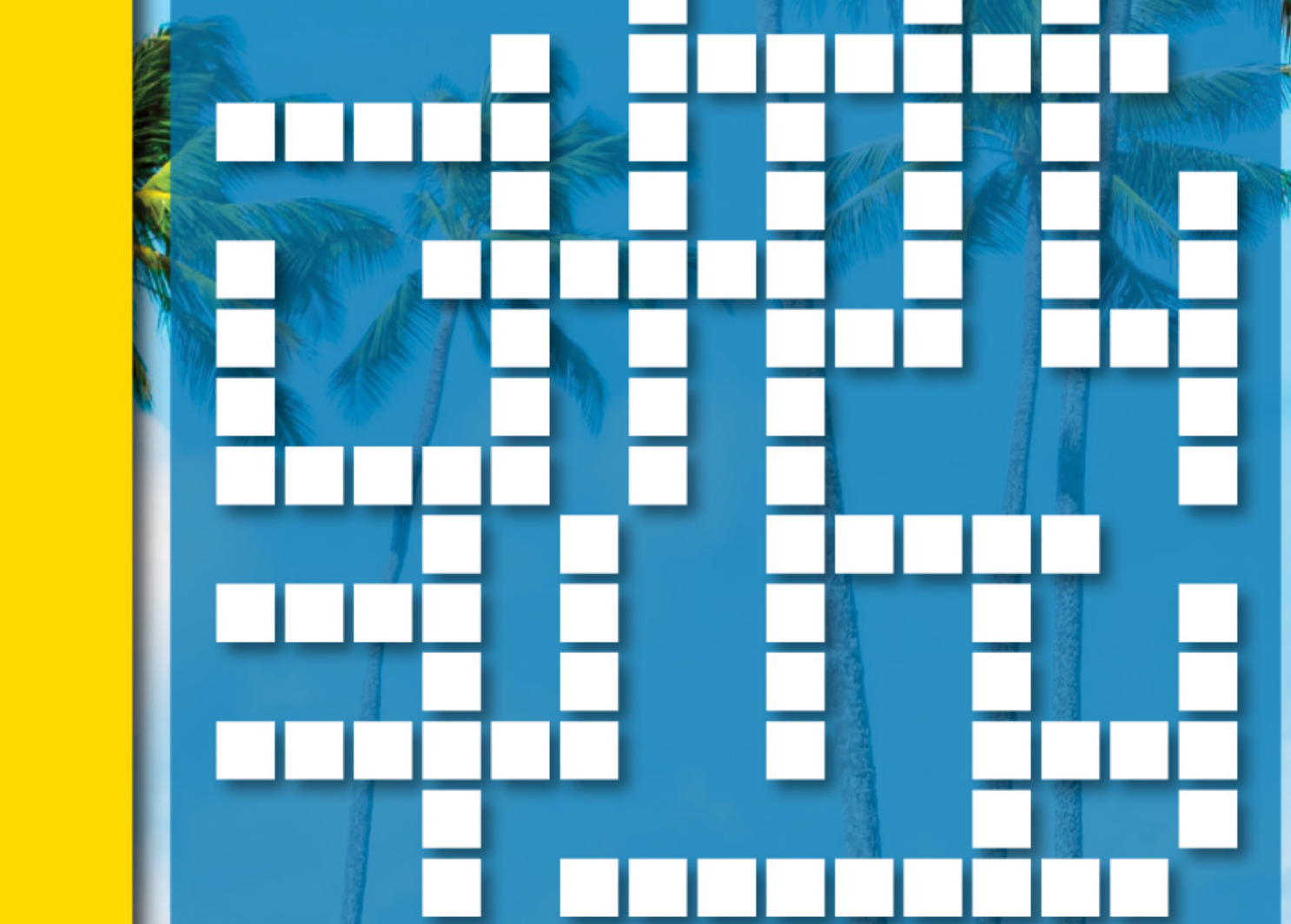
TEXT BY TRACEY WEST
PUZZLE BY GARETH MOORE

WORD FIT: ALOHA, HAWAII!

All the listed words describe things you can see or do in Cruz's home state of Hawaii. Try to fit them all in the grid by placing words horizontally or vertically, one letter per box.

ANSWERS ON PAGE 35

3 LETTERS	4 LETTERS	5 LETTERS	6 LETTERS	7 LETTERS	8 LETTERS	9 LETTERS	11 LETTERS
LEI	BAYS	KAUAI	ATOLLS	BEACHES	HONOLULU	KAHOOLAWE	NA PALI COAST
SUN	HULA	LANAI	NIIHAU	ISLANDS		POLYNESIA	
	LUAU	MAILI	WAILEA	KILAUEA			
	MAUI	OCEAN		MOLOKAI			
	OAHU	SCUBA		WAIKIKI			



The Hawaiian language uses only 12 letters in its alphabet: the vowels *a, e, i, o, u,* and the consonants *h, k, l, m, n, p, w.*

CHECK OUT THE BOOK!

SOLVE MORE PUZZLES!
ExplorerAcademy.com

RYAN ETTER / IKON IMAGES / GETTY IMAGES (HEADER BACKGROUND); ELLENSMILE / DREAMSTIME (PALM TREES); VIDEOWOKART / SHUTTERSTOCK (YELLOW FLOWER); BRAND X (RED FLOWER)

FUNNY FILL-IN

IT'S A JUNGLE OUT THERE!

Ask a friend to give you words to fill in the blanks in this story without showing it to him or her. Then read out loud for a laugh.

BY BECKY BAINES

PLAY MORE FUNNY FILL-IN!
natgeokids.com/ffi

My friends and I _____ (past-tense verb) a machine that can _____ (verb) stuff. But before we could show it off, we had to _____ (verb) it. I put a(n) _____ (noun) on a table and _____ (past-tense verb) a button. Then there was a(n) _____ (adjective) blast. Suddenly I saw green strips towering above me. It was grass—we _____ (adverb ending in -ly) _____ (past-tense verb) ourselves! We heard a noise. I turned and saw a(n) _____ (noun) with eight eyes. My friend quickly scaled a nearby _____ (something in nature), while the rest of us tied our _____ (article of clothing, plural) together to make a rope. Our friend pulled us to safety, with the creature _____ (verb ending in -ing) toward us. A(n) _____ (flying animal) picked us up from there, dropping us on top of our machine. We gathered together and _____ (past-tense verb) on the button. I opened my _____ (body part, plural). I was _____ (adjective) enough to see into my house! Our big adventure had come to a close.

PLAY MORE FUNNY FILL-IN!
natgeokids.com/ffi

JIM PAILLOT

STUMP YOUR PARENTS

If your parents can't answer these questions, maybe *they* should go to school instead of you!

ANSWERS ON PAGE 35

1 **Which of these wacky festivals is real?**
A. the Lumberjack World Championships in Hayward, Wisconsin
B. the Okie Noodling Tournament in Pauls Valley, Oklahoma
C. the Rainbow Gathering in Santa Fe, New Mexico
D. all of the above

2 **_____ is the planet farthest from the sun.**
A. Earth **C.** Mercury
B. Neptune **D.** Saturn

3 **The first compasses were made in _____.**
A. China **C.** Peru
B. Portugal **D.** Zimbabwe

4 **A person who studies trees is called a(n)_____.**
A. dendrologist **C.** treeologist
B. etymologist **D.** geologist

5 **Before graduating high school, the average U.S. kid will have eaten _____ peanut-butter-and-jelly sandwiches.**
A. 800
B. 1,500
C. 2,600
D. 3,500

6 **Which statement is false? Two-toed sloths _____.**
A. are often covered in algae
B. climb upside down
C. shiver
D. eat leaves

7 **A group of grasshoppers is called a _____.**
A. cloud **C.** bloat
B. pod **D.** scrum

8 **A _____ is the world's largest rodent.**
A. chipmunk **C.** capybara
B. New York City rat **D.** marmot

9 **Alfred Nobel, the man for whom the Nobel Peace Prize is named, invented _____.**
A. lightbulbs **C.** hot chocolate
B. sleeping bags **D.** dynamite

10 **Match each country to the currency it uses.**

A. Canada	**1.** metical
B. England	**2.** euro
C. Poland	**3.** dollar
D. Spain	**4.** pound
E. Mozambique	**5.** zloty

"BEE" A GEO-GENIUS!

On May 20, watch kid geography whizzes compete in the National Geographic GeoBee, then see super science come to life in the National Geographic GeoChallenge.
Learn more! natgeoed.org/experiences

KEVIN KELLEY / GETTY IMAGES (SATURN); KISAN / SHUTTERSTOCK (COMPASS); CORNELIA DOERR / GETTY IMAGES (TREE); © MARKSTOUT / DREAMSTIME (SANDWICH); PLTPHOTOGRAPHY / DREAMSTIME (SLOTH); CHARLES KREBS / GETTY IMAGES (GRASSHOPPERS); RYAN MCVAY / GETTY IMAGES (CURRENCY)

BACK TALK

1. **Fill in** the thought balloon.
2. **Cut out** the entire picture (or make a photocopy of it).
3. **Mail** it along with your name, address, phone number, and date of birth to **Nat Geo Kids, Back Talk, P.O. Box 96000, Washington, DC 20090-6000.** Selection for publication in a future issue will be at the discretion of *Nat Geo Kids*.

FROM THE AUGUST 2019 ISSUE

Mom warned me my face would get stuck like this!
Lucy T., 8
Tequesta, Florida

Is there something in my teeth?
Jacob D., 16
Mesa, Arizona

Hair ball!
Khloe A., 11
Snohomish, Washington

Cats rule. Dogs drool.
Xavier D., 11
Oak Hill, Virginia

I'm not *lion*, I'm *feline* tired.
Claire C., 11
Alexandria, Virginia

It must've been something I ate!
Carson E., 9
Sykesville, Maryland

I have morning breath.
Stella K., 9
Western Springs, Illinois

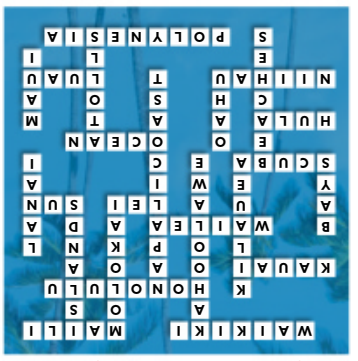
That's right, I'm a *mane*-iac!
Caleb R., 9
Oakland, California

Answers

"Noun Town" (page 28):
The 12 compound nouns are:
1. sleeping bag, **2.** eggplant, **3.** catfish, **4.** bellhop, **5.** ladybug, **6.** housework, **7.** butterfly, **8.** limelight, **9.** arrowhead, **10.** full moon, **11.** sunflower, **12.** coffee table.

"Signs of the Times" (page 29): Signs 1 and 5 are fake.

"Explorer Academy" (page 32):



"Stump Your Parents" (page 34): **1.** D, **2.** B, **3.** A, **4.** A, **5.** B, **6.** C, **7.** A, **8.** C, **9.** D, **10.** A, 3; B, 4; C, 5; D, 2; E, 1.